Release Notes for Cisco RF Gateway 10, Cisco IOS-XE Release 3.2SQ

OL-27863-02
First Released: October 16, 2012
Last Updated: March 18, 2013

These release notes describe the features and caveats for all releases in the Cisco IOS-XE Release 3.2SQ train for the Cisco RF Gateway 10 (RFGW-10) that supports the Cisco RFGW-10 DS-384 line card and the Cisco Supervisor Engine 7-E.

These release notes are updated with each release in the train. This update adds information for Cisco IOS-XE Release 3.2SQ. For a list of the caveats that apply to this release, see the "Caveats" section on page 15.

To download and upgrade to the new ROMMON image for the Cisco RFGW-X45-SUP7-E, see the ROMMON Release Notes for ROMMON Release Notes for Supervisor Engine 7-E on the Cisco RF Gateway 10 at:
http://www.cisco.com/en/US/docs/cable/rf_gateway/release/notes/ROMMOM_RN_RFGW10_SUP7E.html

Cisco recommends that you view the field notices for this release to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at:
http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html.

For information on new features and the Cisco IOS documentation set supported on Cisco IOS-XE Release 3.2SQ, see the "New and Changed Information" section on page 6 and the "Related Documentation" section on page 50.

Contents

Note Use the **service internal** command on the Cisco RFGW-10 only for system debugging and troubleshooting purposes. This command should not be used in normal operation mode.

Overview of Cisco RF Gateway 10 UEQAM Platform

The Cisco RFGW-10 is a carrier-class Universal Edge QAM (UEQAM) platform that offers concurrent support for standard and high-definition digital broadcast television, Switched Digital Video (SDV), Video on Demand (VoD), and DOCSIS/Modular CMTS services. It is a chassis-based product based on open standards with superior performance, capacity, power consumption, ease of management, and scalability. All components of the Cisco RFGW-10 are designed for high availability, including dual Supervisor and Ethernet switching line cards, 1:N Universal Edge QAM line cards, dual timing, communication and control (TCC) line cards, dual load balancing and load sharing DC PEMs and integrated RF switching modules.

The Cisco RFGW-10 is a centralized switching architecture leveraged from the Cisco Catalyst 4500 Series switches. The Cisco RFGW-10 is a 13-rack unit, modular chassis designed for providing front-to-back airflow and system-level redundancy. All chassis components are hot-swappable and redundant. The chassis supports “wire-once” cabling for RF line cards and an integrated dual-zone RF switch matrix. The Supervisor Engine 7-E provides robust Layer 2 to Layer 4 switching with up to 848 Gbps, and up to 250 Mpps packet throughput

System Requirements

This section describes the system requirements for Cisco IOS-XE Release 3.2SQ series and includes the following sections:

Hardware Supported

Table 1 provides information on the hardware supported on the Cisco RFGW-10 for Cisco IOS-XE Release 3.2SQ.

Table 1 Hardware Supported on the Cisco RFGW-10

PID	Description
Cisco RFGW Chassis	
RFGW-10	Chassis with the following slots: 2 Supervisor, 10 RF line card, two TCC, and 12 RFGW-10-RFSW (RF switch card) slots. Also includes the RFGW-10 fan assembly and front panel display (FPD).
Cisco RFGW Series Supervisors	
RFGW-X45-SUP7-E	Cisco RFGW Supervisor 7-E, 4xSFP+ (10/1GE) (primary)
RFGW-X45-SUP7-E=	Cisco RFGW Supervisor 7-E, 4xSFP+ (10/1GE) (spare)
Cisco RFGW Series TCC Cards	
RFGW-TCC1	RFGW timing, communication, and control card v1
RFGW-TCC1=	RFGW timing, communication, and control card v1 (spare)
Cisco RFGW Series Line Cards	
RFGW-DS384	RFGW universal downstream EQAM card, 8 RF ports, 384 QAMs
RFGW-DS384=	RFGW universal downstream EQAM card, 8 RF ports, 384 QAMs (spare)
RFGW-DS48	RFGW Universal Downstream EQAM Card, 48 QAMs
RFGW-DS48=	RFGW Universal Downstream EQAM Card, 48 QAMs
RFGW-DS48-1G	RFGW Universal Downstream EQAM card, 48 QAMs, 1 GHz
RFGW-DS48-1G=	RFGW Universal Downstream EQAM card, 48 QAMs, 1 GHz
RFGW-DS48-1G-BUN	RFGW Universal Downstream EQAM Card 48 QAMs 1G
Cisco RFGW Series RF Switch Cards	
RFGW-10RFSW1=	RFGW RF switch v1 spare.
Cisco RFGW Series PEM Options	
RFGW-10-PWR-DC	RFGW DC PEM with monitoring v1a.
RFGW-10-PWR-DC1=	RFGW DC PEM with monitoring v1 spare.
Cisco RFGW Series Supervisor Memory Options	
SD-X45-2GB-E	Catalyst 4500 2GB SD Memory Card for Sup7-E
SD-X45-2GB-E=	Catalyst 4500 2GB SD Memory Card for Sup7-E spare
USB-X45-4GB-E	Catalyst 4500 4GB USB device for Sup7-E
USB-X45-4GB-E=	Catalyst 4500 4GB USB device for Sup7-E (spare)
Cisco RFGW Series Transceiver Modules	
SFP-GE-T	1000BASE-T SFP (NEBS 3 ESD) (100 m on Cat5 UTP)
SFP-GE-S	1000BASE-SX short wavelength; with DOM (550 m on MMF)
SFP-GE-L	1000BASE-LX/LH long wavelength; with DOM (10 km on SMF)
SFP-10G-SR	10GBASE-SR SFP Module

Table 1 Hardware Supported on the Cisco RFGW-10 (continued)

SFP-10G-LR	10GBASE-LR SFP Module
• GLC-SX-MMD • GLC-LH-SMD	1 Gbps Optical SFP Modules

Note The Cisco IOS-XE Release 3.2SQ train does not support Cisco RFGW-X4516-10GE, the RFGW Supervisor V-10GE.

Software Supported

Table 2 Supported Software

Supported Software	Minimum Release	Latest Release
Cisco IOS-XE Release	3.2.0SQ	3.2.2SQ
ROMMON Release	15.0(1r)SQ(315)	15.0(1r)SQ(315)

For more information on ROMMON, see the ROMMON Release Notes for Supervisor Engine 7-E on the Cisco RF Gateway 10 at:
http://www.cisco.com/en/US/docs/cable/rf_gateway/release/notes/ROMMOM_RN_RFGW10_SUP7E.html

Software Compatibility

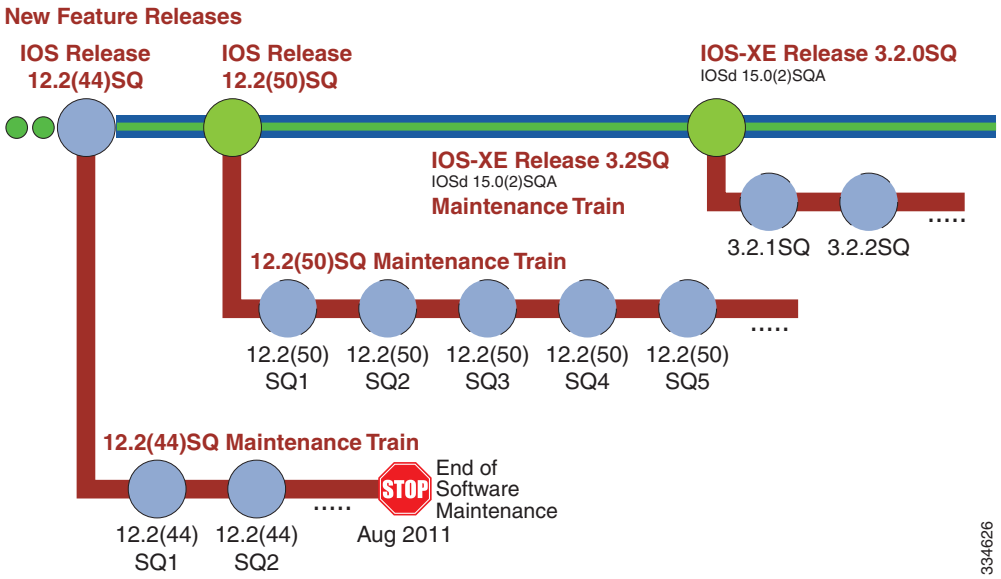
Cisco IOS-XE release represents the continuing evolution of Cisco's pre-eminent IOS operating system.

Cisco IOS-XE release retains the exact same look and feel of IOS, while providing enhanced future-proofing and improved functionality. In Cisco IOS-XE Release 3.2SQ, the Cisco IOS Release 15.0(2)SQA runs as a single daemon within a modern Linux operating system. Additional system functions now run as additional, separate processes in the host OS environment. The operation, support and management of IOS-XE does not require re-training from classic IOS.

Cisco IOS-XE Release 3.2SQ includes the IOSd 15.0(2)SQA daemon, inherits features from previous classic IOS 12.2(50)SQ releases and is the base release for a new maintenance train. Cisco IOS Release 12.2(50)SQ is the last maintenance train supporting the Cisco RFGW-10 Supervisor V-10GE. Cisco IOS-XE Release 3.2.0SQ introduces the Cisco RFGW Supervisor 7-E and the Cisco RFGW-10 DS-384 line card.

The following figure shows the software release train for Cisco RFGW-10.

Figure 1 Cisco IOS Software Release Trains for Cisco RF Gateway 10



Determining the Software Version

To determine the version of Cisco IOS software running on the Cisco RFGW-10 platform, log in to the platform and enter the **show version** EXEC command.

Below is an example of the output from the **show version** command:

```
Router# show version

Cisco IOS Software, IOS-XE Software, RFGW-10 Software (rfgwk10-ENTSERVICESK9-M), Version
03.02.02.SQ RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Thu 14-Mar-13 20:21 by prod_rel_team

Cisco IOS-XE software, Copyright (c) 2002-2010, 2012 by cisco Systems, Inc.
All rights reserved. Certain components of Cisco IOS-XE software are
licensed under the GNU General Public License ("GPL") Version 2.0. The
software code licensed under GPL Version 2.0 is free software that comes
with ABSOLUTELY NO WARRANTY. You can redistribute and/or modify such
GPL code under the terms of GPL Version 2.0.
(http://www.gnu.org/licenses/gpl-2.0.html) For more details, see the
documentation or "License Notice" file accompanying the IOS-XE software,
or the applicable URL provided on the flyer accompanying the IOS-XE
software.

Image text-base: 0x100A6794, data-base: 0x14231EF0

ROM: 15.0(1r)SQ(315)
Joe Revision 50, Snowtrooper Revision 0x0.0x116
```

Feature Set Tables

Table 3 provides a summary of the features supported in the Cisco IOS-XE Release 3.2.0SQ release train.

Table 3 RFGW-10 Hardware and Software Features in Cisco IOS-XE Release 3.2.0SQ

Release	Supported Hardware Features	Supported Software Features
Cisco IOS-XE Release 3.2.0SQ	• RFGW-X45-SUP7-E (Supervisor card)[1] • SD-X45-2GB-E (SD memory card for Supervisor card) • USB-X45-4GB-E (USB memory card for Supervisor card) • RFGW-DS384 • CHAS-RFGW-10= (VID 03 or higher) • RFGW-TCC1 (VID 04 or higher) • RFGW-DS48 • RFGW-DS48-1G • SFP-GE-T (SFP transceiver) • SFP-GE-S (SFP transceiver) • SFP-GE-L (SFP transceiver) • SFP-10G-SR (SFP transceiver) • SFP-10G-LR (SFP transceiver) • GLC-SX-MMD • GLC-LH-SMD	• Cisco RFGW-10 DS-384 line card RF QAM port configuration • Software Licensing for Cisco RFGW-10 DS-384 • M-CMTS DEPI • M-CMTS Ingress DLM • 1:1 and 1:N Line Card Redundancy (up to 2 redundancy groups) • 1:1 Supervisor Card Redundancy • 1:1 Timing, Communication and Control Card Redundancy • SNMP MIBs
Cisco IOS-XE Release 3.2.1SQ	No new hardware support	• Annex A support
Cisco IOS-XE Release 3.2.2SQ	No new hardware support	• Management port • Limited Etherchannel functionality

1. If you are installing a single Cisco Supervisor 7-E in the Cisco RF GW-10 chassis, you must install the Supervisor in slot 2.

New and Changed Information

These sections list the new and existing hardware and software features supported by the Cisco RFGW-10:

- New Hardware Features in Cisco IOS-XE Release 3.2.2SQ, page 7
- New Hardware Features in Cisco IOS-XE Release 3.2.1SQ, page 7
- New Hardware Features in Cisco IOS-XE Release 3.2.0SQ, page 7

New Hardware Features in Cisco IOS-XE Release 3.2.2SQ

There are no new hardware features for Cisco IOS-XE Release 3.2.2SQ.

New Hardware Features in Cisco IOS-XE Release 3.2.1SQ

There are no new hardware features for Cisco IOS-XE Release 3.2.1SQ.

New Hardware Features in Cisco IOS-XE Release 3.2.0SQ

Cisco RFGW-10 DS-384 Line Card

Starting with Cisco IOS-XE Release 3.2.0SQ, the Cisco RFGW-10 chassis supports the Cisco RFGW-10 DS-384 line card. This card is a high-density downstream QAM card that supports a maximum of 384 downstream channels through flexible QAM-capacity licensing. However, this release only supports a maximum of 128 downstream channels and DOCSIS data only.

The Cisco RFGW-10 DS-384 line card provides high availability—up to two protect line cards can be configured to operate in redundancy mode.

This line card supports the following features:

- Different port density combination from 1, 2, 4 to 128 QAMs per port in increments of 4.
- Downstream RF performance compliant with CableLabs CM-SP-DRFI-I11-110210.
- Flexible licensing from 64 to 384 QAMs carriers per line card in increments of 1 QAM. However, Cisco IOS-XE Release 3.2.0SQ supports only 128 QAMs.

For more information, see *Cisco RF Gateway 10 Downstream 384 Line Card Hardware Installation Guide.*

Cisco RF Gateway 10 Supervisor Engine 7-E

When using the Cisco RFGW-10 DS-384 line card, a Supervisor card with greater throughput capabilities is required. Starting with Cisco IOS-XE Release 3.2.0SQ, the RFGW-10 supports the Cisco RF Gateway 10 Supervisor Engine 7-E.

The Cisco RF Gateway 10 Supervisor Engine 7-E is supported by the Cisco IOS-XE Release 3.2.0SQ release train.

The Cisco RF Gateway 10 Supervisor Engine 7-E has the following features:

- 848 Gbps switching capacity with 250 Mpps of throughput
- Four 10 Gigabit Ethernet uplinks (SFP+)
- SFP support on uplinks for flexibility of up to 4 Gigabit Ethernet
- External USB and Secure Data (SD) memory card support for flexible storage options.

For more information on the Cisco RF Gateway 10 Supervisor Engine 7-E, see the *Cisco RF Gateway 10 Hardware Installation Guide*.

Supported Memory Modules

- Catalyst 4500 2GB SD Memory Card for Cisco Supervisor 7-E
- Catalyst 4500 4GB USB device for Cisco Supervisor 7-E

Supported SFP Modules

- SFP-GE-S: 1000BASE-SX short wavelength; with DOM (550 m on MMF)
- SFP-GE-L: 1000BASE-LX/LH long wavelength; with DOM (10 km on SMF)
- SFP-GE-T: 1000BASE-T SFP (NEBS 3 ESD) (100 m on Cat5 UTP)
- SFP-10G-SR: 10GBASE-SR X2 module (26 m on MMF)
- SFP-10G-LR: 10GBASE-LR X2 module (10 km on SMF)
- GLC-SX-MMD: 1 Gbps optical SFP modules
- GLC-LH-SMD: 1 Gbps optical SFP modules

New Software Features in Cisco IOS-XE Release 3.2.2SQ

This section describes the new software features supported in Cisco IOS-XE Release 3.2.2SQ.

Support for the Ethernet Management Port

Starting with Cisco IOS-XE Release 3.2.2SQ, the Cisco RFGW-10 Supervisor Engine 7-E provides support for the Ethernet Management Port.

The Ethernet management port is a Layer 3 host port to which a personal computer can be connected. This port supports speeds of 10/100/1000Mbps in Auto-negotiation mode.

For more information, see
http://www.cisco.com/en/US/docs/cable/rf_gateway/feature/guide/RFGW10_sup_cf.html.

Support for EtherChannel

Starting with Cisco IOS-XE Release 3.2.2SQ, the Cisco RFGW-10 Supervisor Engine 7-E also provides limited support for the EtherChannel.

EtherChannel provides automatic recovery for the loss of a link by redistributing the load across the remaining links. If a link fails, EtherChannel redirects traffic from the failed link to the remaining links in the channel without intervention. EtherChannel bundles up to eight individual Ethernet links into a single logical ink that provides an aggregate bandwidth.

For more information, see

http://www.cisco.com/en/US/docs/cable/rf_gateway/feature/guide/RFGW10_sup_cf.html.

New Software Features in Cisco IOS-XE Release 3.2.1SQ

This section describes the new software features supported in Cisco IOS-XE Release 3.2.1SQ.

Support for Annex A DEPI

Starting with Cisco IOS-XE Release 3.2.1SQ, the Cisco RF Gateway 10 DS-384 line card supports Annex A DEPI with up to 96 QAMs on a port and up to 96 QAMs on each line card. It also supports mixed Annex A and Annex B on the line card with granularity per port, such that

Number_of_Annex_B_QAMs + (4/3)Number_of_Annex_A_QAMs <= 128.

For more information, see *M-CMTS DEPI*.

New Software Features in Cisco IOS-XE Release 3.2.0SQ

This section describes the new software features supported in Cisco IOS-XE Release 3.2.0SQ.

Cisco RFGW-10 DS-384 RF Port Configuration

The Cisco RFGW-10 DS-384 line card is a high-density card and has the following features:

- Maximum of eight RF ports on every line card.
- RF ports support different densities—1, 2, 4 and up to 128 QAMs per port in increments of 4.
- A total of 128 QAMs per line card is supported in this release.
- The default frequency assignment mode is supported. This enables the user to define the start frequency of the RF output spectrum and automatically configures the port for 768 MHz of contiguous spectrum. Users can assign QAM channels anywhere within the configured spectrum.
- Carrier spacing of +/- 6 MHz is supported for Annex B and C, and +/- 8MHz for only Annex A.
- A logical QAM (LQAM) channel is a single RF carrier.
- An LQAM group is a group of eight LQAM channels that share the same RF parameters in an RF profile. For more information, see *Configuring the Cisco RFGW-10 DS-384 Line Card*.

Software Licensing on the Cisco RFGW-10 DS-384 Line Card

The Cisco RFGW-10 licenses are used to control access to the RF channels. It supports QAM-capacity licensing where a customer can invest in partial QAM-capacity of the line card. Table 4 lists the licenses for the Cisco RFGW-10 DS-384 line card.

Note The Cisco IOS-XE Release 3.2.0SQ only supports 128 channels and DOCSIS data on the Cisco RFGW-10 DS-384 line card.

Table 4 Licenses for the Cisco RFGW-10 DS-384 Line Card

Cisco RFGW-10 Device	Cisco IOS Release	Licensing Flavors
Cisco RFGW-10 DS-384 line card	Cisco IOS-XE Release 3.2.0SQ	The stock keeping unit (SKU) for the Cisco RFGW-10 DS-384 line card are: • SWLIC-DS384-BUN (DS-384 QAM license (single QAM) bundle) • SWLIC-DS384 (DS-384 QAM license (single QAM) • L-DS384 (DS-384 QAM Upgrade Licenses (single QAM)

Manual DEPI Configuration

Starting Cisco IOS-XE Release 3.2.0SQ, the 32-bit session IDs are generated internally for the DEPI sessions, and is configured manually on the M-CMTS node, thus improving the performance of the system with higher session load for new line cards.

In Cisco IOS-XE Release 3.2.0SQ, all QAM channels on the RF port can be used for DEPI when the QAM subinterface is configured for DEPI. A QAM-port load-balancing group is a QAM block or midplane 10 Gigabit-Ethernet interface. Two QAM-port load-balancing groups exist per line card and a QAM-port load-balancing group is assigned to QAM channels while configuring local DEPI sessions.

The QAM channels are equally divided between the two QAM-port load-balancing groups on any line card. Each QAM port load-balancing group supports 192 carriers for the Cisco RFGW-10 DS-384 line card, and 24 carriers for the Cisco RFGW-10 DS-48 line card. The **show cable linecard load-balancing-group** command lists the current carriers on the line card.

For more information, see*M-CMTS DEPI*.

1:1 and 1:N Line card Redundancy

The Cisco RFGW-10 DS-48 and Cisco RFGW-10 DS-384 line cards have different ports, hence cannot be used in the same redundancy group. Starting with Cisco IOS-XE Release 3.2.0SQ, the Cisco RFGW-10 supports multiple line card types. Table 5 lists the line card redundancy compatibility between the Cisco RFGW-10 line cards within the same redundancy group.

Table 5 Line Card Redundancy Matrix

Cisco RFGW-10 Line Card	Primary RFGW-10 DS-384	Primary RFGW-10 DS-48-1G	Primary RFGW-10 DS-48
Secondary RFGW-10 DS-384	Yes	No	No
Secondary RFGW-10 DS-48-1G	No	Yes	Yes
Secondary RFGW-10 DS-48	No	No	Yes

For more information, see For more information, see the *1:1 and 1:N Line Card Redundancy*.

DOCS-DRF-MIB

Starting with Cisco IOS-XE Release 3.2.0SQ, the DOCS-DRF-MIB is used to configure Downstream External Physical Interface (DEPI) on the Cisco RFGW-10. Querying these tables displays the QAM interfaces and channels for the Cisco RFGW-10 DS-384 line card.

In addition, the Cisco RFGW-10 supports MIBs common in Cisco IOS, which can be found in the *Cisco RF Gateway 10 MIB Specifications Guide*.

Limitations and Restrictions

This section lists the limitations and restrictions for the Cisco IOS-XE Release 3.2SQ train on the Cisco RFGW- 10.

- Only DOCSIS data is supported.
- Only 128 RF channels are supported on the Cisco RF Gateway 10 DS-384 for this release.
- Cisco IOS-XE Release 3.2.0SQ and Cisco IOS-XE Release 3.2.1SQ do not support management port. Support starts in Cisco IOS-XE Release 3.2.2SQ.

Note In Cisco IOS-XE Release 3.2.0SQ and Cisco IOS-XE Release 3.2.1SQ, the configuration for the management port always appears in the running configuration in shutdown state. The configuration cannot be changed to the no shut state.

- When you use the Cisco RFGW-10 Supervisor 7-E in redundancy mode, the top two front panel uplink ports on the slot 2 supervisor are available for data and management traffic. However, the path between the uplink ports on a standby slot 1 Supervisor and active slot 2 Supervisor has detectable bit errors. Thus, the front panel uplink ports on the slot 1 supervisor are not suitable for data and management traffic in redundancy mode.
- Cisco IOS-XE Release 3.2.0SQ and Cisco IOS-XE Release 3.2.1SQ do not support auto-negotiation on Cisco RFGW-10 DS-384 line card ports 9 and 10 with 1 Gbps SFPs. Support starts in Cisco IOS-XE Release 3.2.2SQ
- Online insertion and removal (OIR) of active Supervisor card is not supported. You must force switchover to the standby Supervisor card before removing the active card.
- Static remote DEPI is not supported.
- Cisco IOS-XE Release 3.2.0SQ and Cisco IOS-XE Release 3.2.1SQ do not support Etherchannel. Limited support starts in Cisco IOS-XE Release 3.2.2SQ.
- Annex A is not supported in the Cisco IOS-XE Release 3.2.0SQ.

Note Starting with Cisco IOS-XE Release 3.2.1SQ Annex A is supported.

- Direct image downgrade to Cisco IOS-XE Release 3.2.0SQ is not supported from releases later than Cisco IOS-XE Release 3.2.1SQ. Image must first be downgraded to Cisco IOS-XE Release 3.2.1SQ before being downgraded to Cisco IOS-XE 3.2.0SQ.

Note This limitation applies only to Cisco IOS-XE Release 3.2.0SQ.

Using the Bug-toolkit

This section describes how you can use the bug toolkit to search for bugs in a Cisco IOS release

Search Bugs

This section explains how to use the Bug ToolKit to search for a specific bug.

Step 1 Go to http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs.

You are prompted to log into Cisco.com. After successful login, the Bug Toolkit page opens.

Step 2 Click **Launch Bug Toolkit**.

Step 3 To search for a specific bug, enter the bug ID in the **Search for Bug ID** field and click **Go** in the **Search Bugs** tab.

To search for bugs in a specific release, enter the following search criteria:

- Select Product Category—Select **Video**.
- Select Products—Select the required product from the list. For example, to view bugs for Cisco uBR10012 Universal Broadband Router, choose **Cisco RF Gateway 10 Series** from the list.
- Software Version—Choose the required Cisco IOS version from the drop-down lists. For example, to view the list of outstanding and resolved bugs in Cisco IOS-XE Release 3.2.0SQ, choose **3.2** from the first drop-down list, **0** from the second drop-down list, and **SQ** from the third drop-down list.
- Search for Keyword(s)—Separate search phrases with boolean expressions (AND, NOT, OR) to search within the bug title and details.
- Advanced Options—You can either perform a search using the default search criteria or define custom criteria for an advanced search. To customize the advanced search, select **Use custom settings for severity, status, and others** and provide the following information:
  - Severity—Select the severity level.
  - Status—Select **Open**, **Fixed**, or **Terminated**.

    Select **Open** to view all the open bugs. To filter the open bugs, clear the Open check box and select the appropriate sub-options that appear below the Open check box. The sub-options are New, Held, More, Open, Waiting, Assigned, Forwarded, Postponed, Submitted, and Information Required. For example, if you want to view only new bugs in Cisco IOS Release 12.2(33)SCA, select **New**.

    Select **Fixed** to view fixed bugs. To filter fixed bugs, clear the Fixed check box and select the appropriate sub-options that appear below the Fixed check box. The sub-options are **Resolved** or **Verified**.

    Select **Terminated** to view terminated bugs. To filter terminated bugs, clear the Terminated check box and select the appropriate sub-options that appear below the terminated check box. The sub-options are **Closed**, **Junked**, and **Unreproducible**. Select multiple options as required.
  - Advanced—Select the **Show only bugs containing bug details** check box to view only those bugs that contain detailed information, such as symptoms and workarounds.
  - Modified Date—Select this option if you want to filter bugs based on the date on which the bugs were last modified.
  - Results Displayed Per Page—Select the appropriate option from the list to restrict the number of results that appear per page.

Step 4 Click **Search**. The Bug Toolkit displays the list of bugs based on the specified search criteria.

Save Bugs

This section explains how to use Bug ToolKit to save the bugs retrieved by your search in a specific release.

Step 1 Perform a search.
Repeat Step 1 through Step 3 in the "Search Bugs" section on page 12.

Step 2 Select the check boxes next to the bug you want to save in the Search Results page and click **Save Checked**.

The Save Bug Settings area appears under the Search Bugs tab.

Step 3 Specify group settings in the **Place in Group** field.

- Existing Group—Select an existing group.
- Create New Group—Enter a group name to create a new group.

Existing groups have their group notification options already set. If you select an existing group, go to Step 5.

Step 4 Specify the following email update (group notification) options.

- No emailed updates—Select if you do not want to receive email updates.
- Yes, email updates to—Enter your email address.
  - On a schedule—Specify the frequency of email delivery.

Step 5 Click **Save Bug**.

The Bug ToolKit saves the selected bugs in the specified group.

Save Search

This section explains how to use Bug ToolKit to save your search after searching for the bugs in a specific release.

Step 1 Perform a search.
Repeat Step 1 through Step 3 in the "Search Bugs" section on page 12.

Step 2 Click **Save Search** in the Search Results page to save your search with the specified criteria.

The Save Search Settings area appears under the My Notifications tab.

Step 3 Enter a name for your search in the **Search Name** field.

Step 4 Specify group settings in the **Place in Group** field.

- Existing Group—Select an existing group.
- Create New Group—Enter a group name to create a new group.

Existing groups have their group notification options already set. If you select an existing group, go to Step 6.

Step 5 Specify the following email update (group notification) options.

- No emailed updates—Select if you do not want to receive email updates.
- Yes, email updates to—Enter your email address.
  - On a schedule—Specify the frequency of email delivery.

Step 6 Click **Save Search**.

The Bug ToolKit saves your search in the specified group.

Retrieve Saved Search or Bugs

This section explains how to use Bug ToolKit to retrieve a saved search or bugs.

Step 1 Go to http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs and click **Launch Bug Toolkit**.

You are prompted to log into Cisco.com.

Step 2 Click **My Notifications** tab.
My Notifications tab displays the Group Name, Summary, and Actions.

Step 3 Click the group in the Group Name column. The group contains saved search and bugs.

Step 4 Retrieve saved search or bugs.

- Click the saved search name to display the Search Results page.
- Click the saved bug to display details or hover your mouse pointer over the Info link.

The My Notifications tab also provides option to delete bug, delete search, delete group, edit group notifications (in the Actions column), move selected saved search or bugs to different group, and to export saved bugs in all the groups to a spreadsheet.

Export to Spreadsheet

The Bug ToolKit provides the following options to export bugs to a spreadsheet:

- Click **Export All to Spreadsheet** link in the Search Results page under the Search Bugs tab. Specify file name and folder name to save the spreadsheet. All the bugs retrieved by the search is exported.
- Click **Export All to Spreadsheet** link in the My Notifications tab. Specify file name and folder name to save the spreadsheet. All the saved bugs in all the groups is exported.

If you are unable to export the spreadsheet, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1-800-553-2447).

Caveats

Caveats describe unexpected behavior in Cisco IOS software releases. Severity 1 caveats are the most serious caveats; severity 2 caveats are less serious. Severity 3 caveats are moderate caveats, and only selected severity 3 caveats are included in the caveats document.

Caveat numbers and brief descriptions for Cisco IOS-XE Release 3.2.0SQ-based releases are listed in this section.

If you have an account on Cisco.com, you can use the Bug Toolkit to find Cisco RFGW-10 caveats of any severity. To reach the Bug Toolkit, use the following URL in your web browser http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs.

Open Caveats for Cisco IOS-XE Release 3.2.2SQ

Caveat	Description

CSCuc26905	Symptom: The following error message is displayed followed by traceback on the active Supervisor card:
	`Sep 20 00:55:32.575: %SYS-2-LINKED: Bad enqueue of 7AE193C8 in queue 7999CEE8 -Process= "<interrupt level>", ipl= 2, pid= 415`
	`Sep 20 14:00:28.759: %ISSU-3-NOT_FIND_MSG_SES: Can not find message session(218959117) to transform msg from transmitting side.`
	Conditions: This issue occurs after a Supervisor card switchover, when the system CPU load is high (over 90%).
	Workaround: There is no workaround.

CSCud76381	Symptom: Upconverter and Timing Communication and Control (TCC) card soft failure error messages are observed on the Cisco RFGW-10. Line cards resets after reporting FPGA failure, and alarm LED turns red. Conditions: This issue occurs when the active TCC in slot 13 is in normal mode and standby TCC in slot 14 is in free run mode and TCC card switchover or failover is performed. Workaround: Perform the following: 1. Verify if the standby TCC card clock is functioning before commanding a switchover. 2. Connect both Cisco RFGW-10 TCC cards and the Cisco CMTS to DTI servers that are traceable to a common clock source. 3. Reset the card is so that the alarm LED turns green. If the card does not reset, clear the alarm using the **clear facility-alarm** command.
CSCue13243	Symptom: The management Fast Ethernet interface goes down. Conditions: This issue occurs when speed and duplex values are set to different values other than the default (auto) value. Workaround: Configure the default (auto) value for speed and duplex settings on the management interface.

Caveat	Description
CSCue15419	Symptom: The management interface accepts spanning tree configuration. Conditions: This issue occurs on the Cisco Supervisor Engine 7-E. Workaround: Set default Management interface spanning tree configurations.
CSCue27919	Symptom: Stale sessions count observed in the **show cable depi-sessions slot count** command output. Conditions: This issue occurs in large scale set up, after configuring DEPI sessions. Workaround: There is no workaround. This is a display issue.
CSCue52025	Symptom: The frequency profile is removed when start-frequency is unconfigured. Conditions: This issue occurs when the start-frequency is configured with an existing frequency profile, and the start-frequency is unconfigured. Workaround: Reconfigure the frequency profile.
CSCue55078	Symptom: The consumed license count shows zero after resetting the line card. Conditions: This issue occurs in DEPI remote learn mode when 1:N line card redundancy is configured and the secondary line card is reset before the primary line card comes up. Workaround: There is no workaround. There is no service impact and only the license count is displayed as zero
CSCue72634	Symptom: Configuring QAM lock using **qam range** command fails throwing an error. Conditions: This issue occurs after issuing the **qam range** command on a QAM port without any max-carriers configured Workaround: Configure max-carriers to all the QAM ports in the line card and configure the QAM lock using **qam range** command. There is no service impact.
CSCue76243	Symptom: The Supervisor 7E, Supervisor 7LE, or Catalyst 4500X cards lose all layer 3 connectivity to or from the switch IP address. Switching continues to work, but IP traffic to or from the switch fails. This includes snmp, ntp, telnet, ssh, and other traffic. Conditions: This occurs when the Supervisor 7E, Supervisor 7LE, or Catalyst 4500X cards are configured with Cisco IOS-XE Release 3.4.0SG. Workaround: Disable Cisco Express Forwarding (CEF) on the layer 3 interfaces to temporarily restore service. When the problem occurs, the switch must be rebooted. To prevent the problem from occurring, shutdown the interface Fa1.

Caveat	Description
CSCue77864	Symptom: Modems go offline after changing the interleave depth value. Conditions: This issue occurs after changing the interleave depth value from 32 to 64 on Cisco CMTS. Workaround: Before changing the interleave depth value at the RF-channel modular-controller terminal on Cisco CMTS, unconfigure and reconfigure interleave depth value.
CSCue78139	Symptom: The rf-parameters in **show depi session verbose** command output display incorrectly. Conditions: This issue occurs after a Supervisor switchover. The current Supervisor shows incorrect values and then becomes standby. Workaround: Verify the same rf-parameters using the **show controllers qam downstream** command. There is no service impact.
CSCue78860	Symptom: RF profile mismatch error messages are seen on the Cisco RFGW-10 router. Conditions: This issue occurs when a mismatched frequency is applied for an active DEPI session and controller configuration is reverted back to the Cisco CMTS. Workaround: There is no workaround. There is no service impact.
CSCue86632	Symptom: Error messages are seen while adding a new interface to an existing channel group using the **channel-group y mode** command. Conditions: This issue occurs when an interface from channel group Y is added to existing channel group X and a new interface without any assigned channel group is configured with channel group Y. The error occurs when group X and Y have eight members. Workaround: There is no workaround.
CSCue87315	Symptom: QAM port that is administratively shut becomes unshut. Conditions: This issue occurs when: 1. Line card is standalone; that is line redundancy is not configured. 2. Standalone line card is reset, causing the port in **shut** state to become **unshut** once the line card comes up. Workaround: Configure the port as **shutdown** after the card comes up.
CSCue91581	Symptom: The **show controllers qam downstream** command output displays incorrect values after Annex change. Conditions: This issue when: 1. Minimum two QAM channels with Annex B come up 2. Active sessions with rf-profile configured and used by QAM channels have the modulation value modified from Annex B to Annex A Workaround: Unconfigure and reconfigure using **no cable downstream rf-profile** *rf-profile-id* command at the QAM channel.

Caveat	Description
CSCuf05080	Symptom: Memory leak is seen after several line card switchover procedures are performed. Conditions: This issue occurs on the Cisco RFGW-10 with line card redundancy and Etherchannel configured, and line card switchover is performed. Workaround: There is no workaround. There is no service impact. The memory leak is marginal and is directly proportional to the number of line card switchover procedures performed.
CSCuf05890	Symptom: Configuration synchronization parser mode error messages are displayed on the Cisco RFGW-10 standby Supervisor card. `%HA_CONFIG_SYNC-3-LBL_CFGSYNC:STANDBY:Failed getting Parser Mode History` Conditions: This issue occurs while performing the Supervisor switchover. Workaround: There is no workaround.

Resolved Caveats for Cisco IOS-XE Release 3.2.2SQ

Caveat	Description
CSCtw57111	Symptom: The **show interface qam** command output displays incorrect bandwidth values when executed at the port level. Conditions: This issue is observed on the Cisco RFGW-10 DS-48 line card. Workaround: There is no workaround.
CSCtx99408	Symptom: The standby Supervisor goes into Route Processor Redundancy (RPR) mode if **rf-profile** with **invalid interleaver-depth** value is applied to the QAM channel. Conditions: This issue occurs while configuring rf-profile on the line cards. When the rf-profile is applied to a QAM Channel, the system automatically applies the interleaver-depth value from the rf-profile to the QAM Channel. This invalid configuration causes a configuration synchronization failure and results in the standby Supervisor going to RPR mode. Workaround: Set default values on QAM channel and perform a redundancy reload of the Cisco RFGW-10.
CSCtz92104	Symptom: Error message are seen on the Supervisor console when the first clock source is connected to the TCC card: Conditions: This issue occurs when the TCC cards have no clock sources and the first clock source is connected to a TCC. The active TCC card goes into fast mode, re-acquiring the lock. The Cisco RFGW-10 DS-384 line card upconverter loses and re-acquires the lock. Workaround: There is no workaround. Ignore this incorrect error message. The upconverter will lose and re-acquire the lock when the TCC cards lose and re-acquire the lock. This is expected behavior

Caveat	Description
CSCua58184	Symptom: Error messages are seen on the Supervisor console when a line card is inserted into a slot: Conditions: This issue occurs if the Supervisor card is unable to read the serial EEPROM (SEEPROM) of the line card when the card is being slowly inserted into the chassis. Workaround: Reinsert the line card. The Supervisor card is successful in reading the EEPROM in the second attempt.
CSCua99738	Symptom: The **show inventory** command output displays the TCC card hardware revision value incorrectly. Conditions: This issue occurs on normal conditions. Workaround: Use the **show idprom module** *module-number* command to view the correct TCC card versions.
CSCub01890	Symptom: The following error message is displayed: `TCC_ERRMSG_GEN_LCD_BUSY_TIMEOUT` Conditions: This issue occurs after the TCC card switchover. Workaround: There is no workaround. This issue has no service-affecting impact.
CSCub01894	Symptom: After the line card redundancy is removed, previous configuration of the new independent card (prior to configuring redundancy) are still preserved and an attempt to bring up the sessions fails. Conditions: This issue occurs under normal conditions. Workaround: Before configuring the stand alone line card as a secondary line card, default all QAM ports of the line card to be configured, as secondary. `Router(config)# default interface Qam <slot>/<port>` or manually remove all the configuration for that line card slot in the newly independent card.
CSCub34355	Symptom: The following error message is displayed: ERROR: Qam <slot>/<port> is administratively shut and will reject the configuration. Conditions: This issue occurs when the default configuration is applied to the port that is in shutdown state. Workaround: If the port is admin_down state, unshut the port before applying the default configuration at the port level.
CSCub46436	Symptom: Continuous “Up/down reason: QC RF Mute mismatch” messages are observed on the Cisco RFGW-10. Conditions: This issue occurs when DEPI remote-learn QAM sessions exist on the Cisco RFGW-10 and few QAM licenses exist for the configured QAM channels. Workaround: Upgrade the line card to have enough QAM licenses for all configured QAM channels.

Caveat	Description

CSCub46770	Symptom: Modems go from w-online to online(pt) state when the modulation is changed to 64 and then reverted back to 256.
	Conditions: This issue occurs when the modulation is directly modified.
	Workaround: Remove the frequency modulation using **no** form of the command and reapply.
	Example:
	`router# configure terminal`
	`router(config)# controller modular-cable 5/0/0`
	`router(config-controller)# no rf-channel 0 frequency`
	`router(config-controller)# rf-channel 0 frequency 555000000 annex B modulation 64 interleave-depth 32`

CSCub73486	Symptom: The LQAM configuration is rejected with the following error:
	`All carrier id for slot 3 have been used. Carrier id is not assigned. Cannot add lqam group or sessions for Qam3/7.26`
	`Error: Invalid lqam group id 45 for Qam3/7.26`
	Conditions: This issue occurs if a saved configuration is copied from a storage device to the running configuration after the RF Gateway 10 is booted up with all default configurations.
	Workaround: Remove the carrier ID command from the saved configuration and then apply it onto the running configuration.

CSCub82362	Symptom: For the Cisco RFGW 10 DS-384 line card, auto-negotiation is *not* supported on ports 9 and 10 with 1 Gbps SFPs. For a scenario where a primary port on the Cisco uBR-MC3GX60V line card is directly connected to ports 9 or 10 of the Cisco RFGW 10 DS-384 line card and primary port link is restored, the backup port still remains active because the primary port does not complete autonegotiation. Conditions: This issue occurs under normal conditions. Auto-negotiation is disabled by default on ports 9 and 10 when using 1 Gbps SFPs. Auto-negotiation remains disabled even after the user enables it from the management system. With port redundancy, the Cisco uBR-MC3GX60V line card always checks for auto-negotiation completion before allowing a failed primary port to return to active state. This behavior does not change even after the user tries to disable auto-negotiation on the Cisco uBR-MC3GX60V primary port. Workaround: Use ports 11 and 12 instead of ports 9 and 10. For ports 9 and 10, configure connected devices for 1 Gbps speed, full duplex, and with auto-negotiation off. With Cisco uBR-MC3GX60V line card port redundancy, use Cisco RFGW 10 DS-384 ports 11 and 12 for primary connections and use ports 9 and 10 for backup and non-redundant connections.

Caveat	Description
CSCub88510	Symptom: Error message is reported on the Supervisor console by the Cisco RFGW-10 DS-384 line card indicating that an RF power level event has occurred. Conditions: This issue occurs after issuing **hw-module reset** command. The "RF power level out of spec" event is generated due a transient power fluctuation when the arrival of traffic to a port is delayed due to a rare race condition during the un-mute of a QAM carrier on a port. Workaround: Perform the RF port interface level **shutdown** and **no shutdown** to restore any DEPI sessions on port. If any operational issues follow the hardware module reset (with RF power level event), perform a software reset of the DS-384 line card using the **cable linecard reset** command to re-program the upconverter module. The **hw-module reset** command resets a given line card and simulates a power cycle of the line card. If any line card reset is performed during normal operation with redundancy configuration, service is maintained by the secondary designated line card.
CSCuc10713	Symptom: QAMs are stuck in “Idle” state. Conditions: This issue occurs when multiple line card failures occur before the revertive timer expires. Workaround: Wait till the revertive timer expires and the revertive switchover completes before initiating another line card failover. Reload the Cisco RF Gateway 10 chassis to recover from the error.
CSCuc13374	Symptom: The following error message is observed on the active and standby Supervisor cards when using default settings for a qam-channel: `'ERROR: This Interleave delay is not supported by the qam's rf-profile 6'` Conditions: This error message appears during default of the channels in which the RF-profiles have interleaver depth values other than I32-J4. Workaround: Associate rf-profile with interleaver depth values as I32-J4.
CSCuc27292	Symptom: The RF profile is not removed even when the **no cable downstream rf profile** command is accepted without any errors or warnings. Conditions: This issue occurs when the RF profile is removed while still applied to the QAM interface. The command to remove the RF profile is accepted, but the RF profile is not removed. Then even after the **no cable downstream rf profile** command is run to remove the RF profile from the interface, the RF profile is still displayed in running configuration. Workaround: Reset the interface that the RF profile was applied to, using the default interface command. The following error messages appears when you default the interface, but this is expected behavior: `ERROR: Rf Profile mismatches group's profile for Qam 4/7:1`

Caveat	Description
CSCuc27709	Symptom: Line card in slot 12 cannot be configured as the primary line card to a redundancy group when the line card in slot 11 is configured as a secondary. Conditions: This issue occurs when the line card in slot 11 is configured as secondary before configuring line card-12 a primary. Workaround: Configure line card-12 as primary before configuring the redundancy group.
CSCuc37532	Symptom: Remote RF profiles created on the Supervisor display the same symbol rate for both Annex-B 256qam and Annex-B 64qam. Conditions: This issue is only a display issue on the Supervisor. In reality, the line card uses the correct symbol rate when 256qam is configured. Workaround: There is no workaround.
CSCuc45114	Symptom: The **show inventory** command output displays Child Serial Number for the chassis instead of parent. Conditions: This issue occurs in normal conditions. Workaround: Use the **show idprom chassis** command to get both parent and child serial number.
CSCuc56647	Symptom: Traceback occurs when a new remote RF profile is created. Conditions: This issue occurs when there are 16 RF profiles existing in the system. The maximum number of RF profile in the systems is 16, and that limit is reached. Workaround: Check the number of existing RF profiles before creating a new one.
CSCuc58675	Symptom: A Qam-redundancy port configured as shutdown comes up in "UP" state instead of remaining in shutdown state. Conditions: This issue occurs if the secondary line card initially goes in active state following the reset of both the primary and secondary line cards. **Note** This issue affects only the running-configuration and not the startup-configuration. Workaround: Manually configure the Qam-red port as shutdown.
CSCuc69406	Symptom: The primary Supervisor card crashes after the Cisco CMTS is reconfigured with a frequency change. Conditions: This issue occurs when RF channels are reconfigured with 6Mhz shifted frequencies. and the last frequency overlaps with another existing RF channel on another controller that has same frequency. Workaround: There is no workaround. However, fix the frequency overlap to recover the overlap channel.
CSCuc90077	Symptom: The **show inventory oid** command displays an incorrect OID value for the Cisco RFGW-10 DS-384 line cards. Conditions: This issue occurs under normal conditions. Workaround: There is no workaround.

Caveat	Description
CSCud07306	Symptom: The standby Supervisor card resets and enters into RPR mode when invalid **interleaver-depth** value is configured for a Annex C rf-profile. Conditions: This issue happens for annex C profile and only when invalid **interleaver-depth** value is configured. Workaround: Do not configure unsupported options such as I12-J17.
CSCud13562	Symptom: The output of the **show interface qam-red** command displays the bandwidth as 64 QAM even though 256 QAM is configured. Conditions: This issue occurs only after a Supervisor card switchover. Workaround: • Use the **show controllers qam** *qam slot*/**rf port**.*qam channel* command to view the correct values. • Do not perform a Supervisor switchover.
CSCud14141	Symptom: Fast Ethernet 1(Management port) is enabled on the Cisco RFGW-10 for management related operations like SNMP, SSH. Conditions: This is an enhancement. Workaround: There is no workaround.
CSCud28064	Symptom: The following error message and traceback is observed on the RFGW console. `.Nov 17 03:30:02.996: %SYS-2-MALLOCFAIL: Memory allocation of 10000 bytes failed from 0x11832D18, alignment 0 Pool: Processor Free: 640572 Cause: Memory fragmentation Alternate Pool: None Free: 0 Cause: No Alternate pool -Process= "SNMP ENGINE", ipl= 0, pid= 350 -Traceback= 10D32524 10D32C70 1181EED0 118213F0 11821700 11832D1C 11833958 11696644 11696844 11691144 116918FC 1094ECF8 1094C6D8 11694628 116693F0 11659D5C` Conditions: This issue occurs when SNMP walk is performed for 9 hours continuously. Workaround: There is no workaround.
CSCud32498	Symptom: Ether Channel feature does not work in Cisco RFGW-X45-SUP7-E and it crashes when shutting down the port-channel interface. Conditions: This issue occurs when ether channel has more than one port mapped to it. Workaround: Remove the ether-channel configuration.

Caveat	Description
CSCud39372	Symptom: Supervisor throws the below error message and traceback when line card is removed. `*Nov 27 13:26:35.118: %SYS-2-LINKED: Bad insqueue of 97FD51F0 in queue 17791108 -Process= "Exec", ipl= 2, pid= 144 -Traceback= 1#6e884be3d809481da9d4675139fd3f99 :10000000+121F3C4 :10000000+1E3A9DC :10000000+4C52B4 :10000000+B9D238 :10000000+B9D5C8 :10000000+C32B0C :10000000+C35D18 :10000000+C39850 :10000000+118F1E8 :10000000+1A64E8 :10000000+119DA18 :10000000+119DF54 :10000000+11A0A48 :10000000+11D8240` Conditions: This issue occurs when a line card is removed from the line card redundancy group (line card redundancy member) and then reconfigured as a member after the line card has been re-inserted. Workaround: Ensure that a line card is present when deconfiguring it as a line card redundancy member.
CSCud63812	Symptom: Values entered for the **counters** command for IPv4 and IPv6 addresses is not inserted in the configuration. Conditions: This issue occurs while entering the counters command in a VLAN interface. Workaround: There is no workaround.
CSCud71246	Symptom: Incorrect slot number is reported in error message. Conditions: This issue occurs when max-carriers value greater than 384 is configured. Workaround: There is no workaround.
CSCud80455	Symptom: Snmpwalk output on QAM channel displays ifSpeed MIB object output is as 155, which is roughly half of the total speed. Conditions: This issue occurs when only 4 ports were configured and then 4 more ports were added. The SNMP output does not change. Workaround: There is no workaround.
CSCud81765	Symptom: Error messages are seen on the Supervisor console causing line card to resets: Conditions: This issue occurs when frequency profile or rf-profile is changed. Workaround: There is no workaround.
CSCud91413	Symptom: The line card log files— slogs1 and slogs2—is not created by the software utility slogger. Conditions: This issue occurs randomly Workaround: Perform the following: 1. Telnet to line card from Supervisor and manually kill slogger using s**lay slogger** command 2. Launch the slogger manually.

Caveat	Description
CSCue05875	Symptom: The secondary Supervisor keeps reloading with PRC mismatch after stateful switchover (SSO). Conditions: This issue occurs when Supervisor and line cad redundancy is configured and SSO switchover is performed. Workaround: Before doing the SSO, reset the secondary card using **hw-module slot reset** command and perform the SSO after line card comes up.
CSCue09705	Symptom: QAM channels configuration on standby Supervisor gets changed after executing **cable downstream rf-shutdown** command. Conditions: This issue occurs on QAM channel modes other than DEPI remote-learn. Workaround: Configure **cable downstream rf-shutdown** command followed by **no cable downstream rf-shutdown** command at the port-level for all affected ports before doing an SSO switchover.
CSCue11899	Symptom: The line card re-formats and corrupts the flash file system on the Cisco RFGW-10. Conditions: This issue occurs when repeated line card switchover is performed. Workaround: Re-install the license after line card boots up.
CSCue27843	Symptom: The Cisco RFGW 10 front panel is showing Cisco IOS version instead of Cisco IOS-XE release version. Conditions: This issue is observed on Cisco RFGW-10 with SUP7-E running Cisco IOS-XE. release Workaround: There is no workaround. This does not impact service.
CSCue34849	Symptom: The force shut channels cannot be enabled after upgrading the license in remote DEPI mode. Conditions: This issue occurs if the installed license count is reduced and increased back. Workaround: Resetting the line card will enable the channels.

Open Caveats for Cisco IOS-XE Release 3.2.1SQ

Caveat	Description
CSCtx99408	**Symptom:** The standby route processor goes into Route Processor Redundancy (RPR) mode if an rf-profile with an invalid interleaver-depth is applied to a QAM channel. **Conditions:** This issue occurs when an invalid interleaver-depth value is configured for an rf-profile. This invalid configuration causes configuration-sync failure and results in the standby going to RPR mode. **Workaround:** Apply the defaulting rf-profile to the affected QAM channel.
CSCuc69406	**Symptom:** The primary Supervisor card crashes after the Cisco CMTS is reconfigured with a frequency change. **Conditions:** This issue occurs when RF channels are reconfigured with 6Mhz shifted frequencies. and the last frequency overlaps with another existing RF channel on another controller that has same frequency. **Workaround:** There is no workaround. However, fix the frequency overlap to recover the the overlap channel.
CSCuc74644	**Symptom:** A line card switchover is followed by a Supervisor switchover. Also, the modems dropped offline and recovered immediately. **Conditions:** This issue occurs when the system is upgraded to a new release. **Workaround:** There is no workaround.

Caveat	Description
CSCuc83164	**Symptom:** The following error messages are observed when the Annex value is changed from Annex A to Annex B or from Annex B to Annex A: `RFGW-3-LINECARD_ERRMSG_ERR: SLOT 11:BB_ERRMSG_DS_PHY_SET_FREQ_ERR: Error setting freq 485000000, for port 3, ch 7 *Oct 22 2012 04:51:17.811 UTC: %RFGW-3-LINECARD_ERRMSG_ERR: SLOT 3:BB_ERRMSG_DS_PHY_INVALID_FREQ_PARAMS: Error:Chan-0, freq-429000000, not in port-3, lane-1, block-3 *Oct 22 2012 04:51:17.811 UTC:%RFGW-3-UNEXPECTED: Invalid response received for HW CNFG QAM message` **Conditions:** This issue occurs when the Annex value is changed (from Annex A to Annex B or from Annex B to Annex A) on the Cisco CMTS with remote DEPI configured. **Workaround:** Choose frequency range + 4Mhz while choosing the frequency range from the frequency profile.
CSCuc88700	**Symptom:** The Cisco DS48 modems do not come w-online(pt) (wideband-online). **Conditions:** This issue occurs in remote learn DEPI mode when DEPI tunnels are removed and added on the RF Gateway-10 QAM interface. **Workaround:** Reset the line card to enable modems to come w-online(pt).
CSCuc90077	**Symptom:** The **show inventory oid** command displays an incorrect OID value for the Cisco DS384 line cards. **Conditions:** This issue occurs under normal conditions. **Workaround:** There is no workaround.

Caveat	Description
CSCud03215	**Symptom:** Modems fall offline after a **hw-module reset** of the secondary line card is performed. **Conditions:** This issue occurs under the following conditions: 1. Slot 11 is a primary line card and slot 12 is the secondary line card 2. A line card switchover from slot 11 to slot 12 is performed. 3. A line card switchover back from slot 12 to slot 11 is performed using the **hw-module module 12 reset** command. Modems drop offline and services through these modems are disrupted. **Workaround:** Avoid using the **hw-module module 12 reset** command. Instead, use the **redundancy linecard switchover** command from slot 12 to revert back. **Note** The **redundancy linecard switchover** command only does a soft reset of slot 12. To perform a hard reset: 1. **redundancy linecard switchover** from slot 12. 2. **hw-module module 12 reset** This triggers a hard reset. Because slot 12 is in a standby state, the hard reset does not affect services.

Caveat	Description

CSCud09192	**Symptom:**
	The following traceback and error messages are displayed:
	`-Traceback= 1#98d186a1014295b6fa6b64935327c7da :10000000+121F87C:10000000+13FD2A0:10000000+13FEB34 :10000000+13FF444 :10000000+1E358A0:10000000+B9DC98 :10000000+C32FC4:10000000+C36554:10000000+C3A13C :10000000+118F6A0 :10000000+5EEB2C :10000000+5EF584 :10000000+5E9D88`
	`PDT: %COMMON_FIB-4-FIBMISSINGHWIDB: STANDBY:No fibhwidb while initializing fibidb for Qam-red4/1 (if_number 203)`
	`-Traceback= 1#98d186a1014295b6fa6b64935327c7da :10000000+121F87C :10000000+13FE5F4 :10000000+13FF444 :10000000+1E358A0 :10000000+B9DC98 :10000000+C32FC4 :10000000+C36554 :10000000+C3A13C :10000000+118F6A0 :10000000+5EEB2C :10000000+5EF584 :10000000+5E9D88`
	`PDT: %SNMP-3-DVR_DUP_REGN_ERR: STANDBY:Attempt for dupe regn with SNMP IM by driver having ifIndex 177 and ifDescr Qam-red4/1`
	`-Traceback= 1#98d186a1014295b6fa6b64935327c7da :10000000+121F87C :10000000+38ACD4 :10000000+38ADB4 :10000000+BCBFD0 :10000000+B9D9C4 :10000000+B9DD48 :10000000+C32FC4 :10000000+C36554 :10000000+C3A13C :10000000+118F6A0 :10000000+5EEB2C :10000000+5EF584 :10000000+5E9D88`
	Conditions:
	This issue occurs after powering off the cisco RFGW 10 DS-384 line card.
	Workaround:
	Reload the RF Gateway 10 chassis.

CSCud09384	**Symptom:**
	The following line card failure messages are displayed:
	`%RFGW-3-LINECARD_FAILURE: Linecard in slot 4 is reporting a SerDes Failure (0x0000)`
	`%RFGW-3-LINECARD_FAILURE: Linecard in slot 7 is reporting a SerDes Failure (0x0000)`
	`%RFGW-3-LINECARD_FAILURE: Linecard in slot 9 is reporting a SerDes Failure (0x0000)`
	Conditions:
	This issue occurs after a Supervisor switchover.
	Workaround:
	Reload the RF Gateway 10 chassis.

Caveat	Description
CSCud13562	**Symptom:** The output of the **show interface qam-red** command displays the bandwidth as 64 QAM even though 256 QAM is configured. **Conditions:** This issue occurs only after a Supervisor switchover. **Workaround:** • Use the **show controllers qam** <*qam slot*>/<**rf port**>.<*qam channel*> command to view the correct values. • Do not perform a Supervisor switchover.
CSCud17139	**Symptom:** Some remote learn DEPI sessions are in IDLE state when the frequency profile is un-configured from QAM interface. **Conditions:** This issue occurs when the QAM port is set to a start frequency of 143 Mhz by default and the frequency profile is unconfigured. This causes issues for some Annex A carriers. **Workaround:** If you need to switch from the frequency profile method to the start frequency method for annexA, do not un-configure the existing frequency profile by using the **no cable downstream freq-profile** command. Instead, simply apply a proper start frequency other than 143 Mhz.
CSCud21027	**Symptom:** The following error message is displayed: `COMMON_FIB-3-FIBIDBINCONS2: STANDBY:An internal software error occurred.` **Conditions:** This issue occurs when line cards are un-configured and re-configured along with resetting or removing/re-inserting the same line cards. **Workaround:** There is no workaround.
CSCud24936	**Symptom:** Modulation change in the rf-profile are not updated on active sessions in the Manual DEPI mode. **Conditions:** This issue occurs under modulation values are changed from 64 QAM to 256 QAM, or from 256 QAM to 64 QAM. **Workaround:** Manually create two different Annex A rf-profiles—each for 64 qam and 256 qam and apply them based on the requirement.

Resolved Caveats for Cisco IOS-XE Release 3.2.1SQ

Caveat	Description
CSCub99200	**Symptom:** Annex A modems connected to the Cisco RF Gateway 10 DS-384 line card go offline when the frequency profile is changed. **Conditions:** This issue occurs when the frequency profile is changed from low to high or high to low and some Annex A QAM channels go offline. **Workaround:** Shut/no shut the QAM port to bring the modems back online.

CSCuc29309	**Symptom:**
	The output for the **show tech** command is unable to get the boot log output from the Cisco RFGW-10 DS-384 line card flash.
	
	Conditions:
	This issue occurs when the system log files exceed 1 Mb in size and the Supervisor card logs an IPC failure message for the Cisco RFGW-10 DS-384 line card.
	
	Workaround:
	1. Telnet to the line card to manually convert the line card log from binary format to TXT:
	On the line card console, do the following:
	`sloginfo /flash/slogs1 > /flash/slogs1.txt`
	`sloginfo /flash/slogs2 > /flash/slogs2.txt`
	`sloginfo /flash/slogs1_boot > /flash/slogs1_boot.txt`
	`sloginfo /flash/slogs2_boot > /flash/slogs2_boot.txt`
	2. From the Supervisor console, transfer these files to another location:
	`copy linecard-3-flash:slogs1.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs2.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs1_boot.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs2_boot.txt | redirect tftp......`

CSCuc51836	**Symptom:** The speed of the fan is at a higher value than the level needed for controlling the chassis temperature. **Conditions:** This issue occurs under normal conditions. **Workaround:** There is no workaround. There is no functional impact.

Caveat	Description
CSCuc61424	**Symptom:** On the Cisco RFGW-10 DS-384 line card, the DTI timing offset increases in time, when the offset should reduce it. **Conditions:** This issue occurs when the user inputs the DS-384 timing offset in the command line interface (CLI). **Workaround:** Do not use the timing offset for the Cisco RFGW-10 DS-384 line card.
CSCuc99361	**Symptom:** Traffic is lost if user downgrades from a release later than Cisco IOS-XE Release 3.2.1SQ to Cisco IOS-XE Release 3.2.1SQ or Cisco IOS-XE Release 3.2.0SQ. **Conditions:** This issue occurs under normal conditions. **Workaround:** First downgrade to Cisco IOS-XE Release 3.2.1SQ before downgrading to IOS-XE 3.2.0SQ.
CSCud06038	**Symptom:** Cannot configure 24 QAM DEPI local sessions for Annex A with modulation 256. **Conditions:** This issue occurs on the Cisco DS-48 line cards where the max bandwidth on mid-plane is 1Gbps. Because there is insufficient bandwidth, the line card rejects the sessions. **Workaround:** Use a maximum of 19 DEPI sessions on the line card.
CSCud15925	**Symptom:** The following error message is displayed: `LC_ERRMSG_FAILOVER_TRIGGER UPX Hi priority event (SET): module:0 idx:765 desc:UPX RF Power Level out of spec, type 11, data 0x800192fd` **Conditions:** This issue occurs when there is a reset of the Cisco CMTS with remote DEPI sessions configured in Annex A and Annex A modems are connected to DS384 line card. **Workaround:** Reset line card.

Caveat	Description
CSCud30159	**Symptom:** Duplicate RF profiles are allowed, thereby causing synchronization issues and Supervisor switchover failure. **Conditions:** This issue occurs when duplicate local rf-profile is created and then a supervisor switchover is triggered. **Workaround:** Remove the RF profile. Do not convert this RF profile to a duplicate of existing profiles
CSCud36776	**Symptom:** The Supervisor card crashes. **Conditions:** This issue occurs when the **show platform hardware interface all** command is executed through the **show tech-support** command. **Workaround:** There is no workaround.

Open Caveats for Cisco IOS-XE Release 3.2.0SQ

Caveat	Description
CSCty03978	**Symptom:** The following error message is displayed when modifying the license priority: `%LICENSE-6-VIOLATION: Feature DS_License 1.0 count violation-count=64` **Conditions:** This issue occurs when modifying the temporary license priority. **Workaround:** Reload the line card.
CSCty84981	**Symptom:** The 'missing IDB for FIBIDB' error message is displayed after the Supervisor switchover: `COMMON_FIB-4-FIBNULLIDB` **Conditions:** This issue occurs when: 1. 1:1 redundancy (with 3 and 11 cards) and 1:N redundancy (with 4, 5, 6, 12) redundancy groups are configured. 2. A 'redundancy reload peer' is performed. 3. After both supervisors are up again, a 'redundancy force-switchover' is performed. **Workaround:** There is no workaround.
CSCty99783	**Symptom:** The following error message is displayed when the license priority is modified: `%LICENSE-1-REQUEST_FAILED:License request for feature DS_License 1.0 failed in this device.` **Conditions:** This issue occurs when the temporary license priority is modified and the license count is not updated or synchronized with the Supervisor card. **Workaround:** Reload the line card.

Caveat	Description
CSCtz92104	**Symptom:** DPLL and MPEG error messages are printed to the console when the TCC cards are disconnected and then reinserted. **Conditions:** This issue occurs when: 1. Either both the TCC card have failed. 2. Or when the TCC card is in 'fast' mode (reacquiring clock). This error is expected for that transient period. **Workaround:** There is no workaround.
CSCua58184	**Symptom>** The following error is seen on the Supervisor console when a line card is inserted into a slot: `C4K_CHASSIS-3-LINECARDSEEPROMREADFAILED: Failed to read module 4's serial eeprom, try reinserting module` **Conditions:** This issue occurs if the Supervisor card is unable to read the serial EEPROM (SEEPROM) of the line card when the card is being slowly inserted into the chassis. **Workaround:** Reinsert the line card. The Supervisor card is successful in reading the EEPROM in the second attempt.
CSCua62962	**Symptom:** The following error message may be generated on the standby Supervisor card for the primary line card ports: `LCRED-3-HWIDB_SUBBLOCK_CREATE_FAIL` **Conditions:** This issue occurs for a line card redundancy group, if one or more primary line cards are reset, followed by configuration of a secondary line card. This issue can impact data traffic following a Supervisor switchover for the affected ports. **Workaround:** Either reset the standby Supervisor card or modify the secondary configuration requirement to ensure all primary line cards in the redundancy group are present and active before configuring the secondary line card for the group.

Caveat	Description
CSCua72252	**Symptom:** The output of the **show controller linecard 3 bandwidth** displays the value "0" for the used-bandwidth field. **Conditions:** This issue occurs when: 1. A line card switchover occurs from the CMTS side. 2. The standby line card became active. 3. The associated QAM-channel used-bandwidth field of the **show controller linecard 3 bandwidth** displays the value "0". **Workaround:** Switch back over to the primary line card on CMTS side.
CSCua99738	**Symptom:** The **show inventory** command shows incorrect values for the TCC hardware revision. **Conditions:** This issue occurs under normal conditions. **Workaround:** Use the **show idprom module** command to get the correct values.
CSCub01890	**Symptom:** The following error message is displayed: `TCC_ERRMSG_GEN_LCD_BUSY_TIMEOUT` **Conditions:** This issue occurs after the timing and clock card (TCC) switchover. This issue has no service-affecting impact. **Workaround:** There is no workaround.

Caveat	Description
CSCub01894	**Symptom:** After the line card redundancy is removed, previous configuration of the new independent card (prior to configuring redundancy) are still preserved and an attempt to bring up the sessions fails. **Conditions:** This issue occurs under normal conditions. **Workaround:** Before configuring the stand alone line card as a secondary line card, default all QAM ports of the line card to be configured, as secondary. `Switch(config)#default interface Qam <slot>/<port>` Or, manually remove all the configuration for that line card slot in the newly independent card.
CSCub02324	**Symptom:** The following error is observed: `Failed to lookup existing ifindex for an interface on the Standby, allocating a new ifindex from the Active` **Conditions:** This issue occurs when executing the **redundancy force-switchover** command. **Workaround:** There is no workaround. Ignore message; there is no operational impact.
CSCub34355	**Symptom:** The following error message is displayed: `ERROR: Qam <slot>/<port> is administratively shut and will reject the configuration.` **Conditions:** This issue occurs when the default configuration is applied to the port that is in shutdown state. **Workaround:** If the port is admin_down state, unshut the port before applying the default configuration at the port level.

Caveat	Description
CSCub40326	**Symptom:** Removing a SPAN configuration causes both Supervisor cards to reload. **Conditions:** This issue occurs when SPAN source and SPAN destination interfaces are configured. The filter should be negated using the **no config** command for a non-switchport interface. **Workaround:** 1. Do not remove the filter configuration. 2. Configure monitor source command before configuring the interface with no switchport.

CSCub46770	**Symptom:**
	Modems go from w-online(pt) to online(pt) state when the modulation is changed to 64 and then reverted back to 256.
	
	Conditions:
	This issue occurs when the modulation is directly modified.
	
	Workaround:
	To change configuration:
	`router# configure terminal`
	`router(config)# controller modular-cable 5/0/0`
	`router(config-controller)# no rf-channel 0 frequency`
	`router(config-controller)# rf-channel 0 frequency 555000000 annex B modulation 64 interleave-depth 32`

CSCub46777	**Symptom:** When different versions of the Cisco IOS-XE image are loaded, the sessions on the RF Gateway10 front panel TenGigE are absent. **Conditions:** This issue occurs under normal conditions. **Workaround:** Set link-flap value to 10 on the aggregation switch.
CSCub49579	**Symptom:** The output of the **show interfaces modular-Cable** <*controller:channel*> **dlm** command does not display the values for DLM. **Conditions:** This issue occurs when the sampling rate for the corresponding rf-channel of the modular controller is set to 500. **Workaround:** For the depi-tunnel configured in the corresponding rf-channel of modular controller, set the retransmit retries value and the retransmit initial retries value to 10.

Caveat	Description
CSCub59125	**Symptom:** DEPI sessions stay 'Idle' on the line card. **Conditions:** This issue occurs while rebooting RF Gateway 10. **Workaround:** Reset the faulty line card.

CSCub73486	**Symptom:**
	The LQAM configuration is rejected with the following error:
	`All carrier id for slot 3 have been used. Carrier id is not assigned.`
	`Cannot add lqam group or sessions for Qam3/7.26`
	`Error: Invalid lqam group id 45 for Qam3/7.26"`
	
	Conditions:
	This issue occurs if a saved configuration is copied from a storage device to the running configuration after the RF Gateway 10 is booted up with all default configurations.
	
	Workaround:
	Remove the carrier ID command from the saved configuration and then apply it onto the running configuration.

CSCub75878	**Symptom:** The following error message is displayed on the Supervisor standby console: `%COMMON_FIB-3-FIBIDBEARLYCALL: STANDBY:Attempt to update fibidb prior to completion of idb initialization.` **Conditions:** This issue occurs the Cisco RFGW-10 DS-384 line card is inserted in a slot after removing the Cisco DS-48 line card. **Workaround:** Reset the line card in the slot.

Caveat	Description
CSCub82362	**Symptom:** For the Cisco RFGW 10 DS-384 line card, autonegotiation is *not* supported on ports 9 and 10 with 1 Gbps SFPs. For a scenario where a primary port on the Cisco uBR-MC3GX60V line card is directly connected to ports 9 or 10 of the Cisco RFGW 10 DS-384 line card and primary port link is restored, the backup port still remains active because the primary port does not complete autonegotiation. **Conditions:** This issue occurs under normal conditions. Autonegotiation is disabled by default on ports 9 and 10 when using 1 Gbps SFPs. Autonegotiation remains disabled even after the user enables it from the management system. With port redundancy, the Cisco uBR-MC3GX60V line card always checks for autonegotiation completion before allowing a failed primary port to return to active state. This behavior does not change even after the user tries to disable autonegotiation on the Cisco uBR-MC3GX60V primary port. **Workaround:** Use ports 11 and 12 instead of ports 9 and 10. For ports 9 and 10, configure connected devices for 1 Gbps speed, full duplex, and with autonegotiation off. With Cisco uBR-MC3GX60V line card port redundancy, use Cisco RFGW 10 DS-384 ports 11 and 12 for primary connections and use ports 9 and 10 for backup and non-redundant connections.

CSCub87522	**Symptom:**
	The following error is seen on the Supervisor console:
	`EDT: %IOSXE-3-PLATFORM: process kernel: isp1362_release_ptd@399: ERR: PTD STALL!`
	`EDT: %IOSXE-3-PLATFORM: process kernel: isp1362_hcd isp1362_hcd.0: dev 2 ep2out scatterlist error`
	Conditions:
	This issue occurs when a file is copied to the USB device.
	Workaround:
	There is no workaround. The system retries the read and write operation and the error is recovered automatically.

Caveat	Description
CSCub89864	**Symptom:** The following error message is seen on active Supervisor console when the standby Supervisor comes up after a redundancy switchover. `%C4K_SUPERVISOR-3-INITERROR: STANDBY:Packet switching asic init failure. Requires reboot.` **Conditions:** This issue occurs when the primary line card is reset/removed and the switchover happens simultaneously. **Workaround:** There is no workaround. This issue occurs rarely because of an initialization issue, which completes upon retry.
CSCub95552	**Symptom:** Cable modems flap when the line card switchover is initiated using the **cable linecard reset** command. **Conditions:** This issue occurs with line card in slot 11 to line card in slot 12 switchovers. However, this issue can happen on any line card switchover. **Workaround:** Do not use the **cable linecard reset** command. Instead use the **redundancy linecard switchover** command.
CSCuc01025	**Symptom:** After a Supervisor switchover, when executing the configuration to remove the line card redundancy, the standby supervisor silently reloads itself. **Conditions:** This issue occurs under normal conditions. **Workaround:** There is no workaround. The standby supervisor resets itself and comes back healthy without any issues. No manual intervention is required.

Caveat	Description

CSCuc01153	**Symptom:**
	The following error messages are observed:
	`%RFGW-3-LINECARD_ERRMSG_ERR: SLOT 11:For port:0, ch_id:3, Cannot configure qam in a port without configuring port first`
	`%RFGW-3-LINECARD_ERRMSG_ERR: SLOT 11:BB_ERRMSG_DS_PHY_INVALID_FREQ_PARAMS: Error:Chan-3, freq-573000000, not in port-0, lane-2, block-2`
	`%RFGW-3-UNEXPECTED: Invalid response received for HW CNFG QAM message`
	Conditions:
	This issue occurs while configuring line card redundancy with remote DEPI configurations followed by a reset of the line card.
	Workaround:
	Reload the Cisco RF Gateway 10 chassis.

CSCuc02064	**Symptom:** If the line card switchover and Supervisor card switchover occur with a few seconds of each other, the QAM channels are moved to muted state. The line card status for the DEPI sessions are also displayed as being in OFF state. **Conditions:** This issue occurs while performing a line card switchover within a few seconds of a Supervisor card switchover. **Workaround:** Reset the primary and secondary line cards.
CSCuc02232	**Symptom:** After the online insertion and removal (OIR) of the Cisco RFGW 10 DS-384 line card, some "idle" DEPI sessions are also displayed in the output of the **show cable depi l2tp** command. **Conditions:** This issue occurs only on a standalone DS-384 line card and when line card redundancy is not configured. **Workaround:** There is no workaround; sessions are cleared once they are timed out. No manual intervention is needed.

Caveat	Description
CSCuc10713	**Symptom:** QAMs are stuck in "Idle" state. **Conditions:** This issue occurs when multiple line card failures occur before the revertive timer expires. **Workaround:** Wait till the revertive timer expires and the revertive switchover completes before initiating another line card failover. Reload the Cisco RF Gateway 10 chassis to recover from the error.
CSCuc13374	**Symptom:** The following error message is observed on the active and standby Supervisor cards when using default settings for a qam-channel: `'ERROR: This Interleave delay is not supported by the qam's rf-profile 6'` **Conditions:** This error message appears during default of the channels in which the RF-profiles have interleaver depth values other than I32-J4. **Workaround:** Associate rf-profile with interleaver depth values as I32-J4.
CSCuc24855	**Symptom:** The QAM ports of a non-redundant Cisco RFGW 10 DS-384 line card are not displayed in the output of the **show running-configuration** command on the standby Supervisor card. **Conditions:** This issue occurs only on the Cisco RFGW 10 DS-384 line card in slot 11 or 12 after the card is unconfigured as a Secondary member of the line card redundancy group. Any configuration of the QAM port of such line card can cause the standby Supervisor to detect a configuration mismatch condition resulting in the reboot of the standby Supervisor. After the standby Supervisor reboots, the condition is fully recovered. **Workaround:** There are two workarounds: • Reboot the standby Supervisor. • After the line card in slot 11 or 12 comes back up following its uncofiguration as a Secondary line card, run the **hw module reset** command to reset the line card.

Caveat	Description

CSCuc26905	**Symptom:**
	The following error message is displayed followed by traceback on the active supervisor card:
	`Sep 20 00:55:32.575: %SYS-2-LINKED: Bad enqueue of 7AE193C8 in queue 7999CEE8 -Process= "<interrupt level>", ipl= 2, pid= 415`
	`Sep 20 14:00:28.759: %ISSU-3-NOT_FIND_MSG_SES: Can not find message session(218959117) to transform msg from transmitting side.`
	Conditions:
	This issue occurs after the Supervisor card switchover when the system CPU load is high (over 90%).
	Workaround:
	There is no workaround.

CSCuc27292	**Symptom:** The RF profile is not removed even when the **no cable downstream rf profile** command is accepted without any errors or warnings. **Conditions:** This issue occurs when the RF profile is removed while still applied to the QAM interface. The command to remove the RF profile is accepted, but the RF profile is not removed. Then even after the **no cable downstream rf profile** command is run to remove the RF profile from the interface, the RF profile is still displayed in running configuration. **Workaround:** Reset the interface that the RF profile was applied to, using the default interface command. The following error messages appears when you default the interface, but this is expected behavior: `ERROR: Rf Profile mismatches group's profile for Qam 4/7:1`
CSCuc27709	**Symptom:** Line card in slot 12 cannot be configured as the primary line card to a redundancy group when the line card in slot 11 is configured as a secondary. **Conditions:** This issue occurs when the line card in slot 11 is configured as secondary before configuring line card-12 a primary. **Workaround:** Configure line card-12 as primary before configuring the redundancy group.

Caveat	Description

CSCuc29309	**Symptom:**
	The output for the **show tech** command is unable to get the boot log output from the Cisco RFGW-10 DS-384 line card flash.
	
	Conditions:
	This issue occurs when the system log files exceed 1 Mb in size and the Supervisor card logs an IPC failure message for the Cisco RFGW-10 DS-384 line card.
	
	Workaround:
	1. Telnet to the line card to manually convert the line card log from binary format to TXT:
	On the line card console, do the following:
	`sloginfo /flash/slogs1 > /flash/slogs1.txt`
	`sloginfo /flash/slogs2 > /flash/slogs2.txt`
	`sloginfo /flash/slogs1_boot > /flash/slogs1_boot.txt`
	`sloginfo /flash/slogs2_boot > /flash/slogs2_boot.txt`
	2. From the Supervisor console, transfer these files to another location:
	`copy linecard-3-flash:slogs1.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs2.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs1_boot.txt | redirect tftp.......`
	`copy linecard-3-flash:slogs2_boot.txt | redirect tftp......`

CSCuc29634	**Symptom:** While changing an RF profile that is applied to manual qam interface, the system stops responding and the following IPC message is displayed: `Dec 25 10:33:18.918: %RFGW-3-IPC_SEND_MESSAGE: IPC send message 261 to port RFGW: lc %d:hw control on linecard 4 failed for reason timeout` **Conditions:** This issue occurs when the RF profile that is being changed is applied to a QAM interface. **Workaround:** There is no workaround.
CSCuc37532	**Symptom:** Remote RF profiles created on the Supervisor display the same symbol rate for both Annex-B 256qam and Annex-B 64qam. **Conditions:** This issue is only a display issue on the Supervisor. In reality, the line card uses the correct symbol rate when 256qam is configured. **Workaround:** There is no workaround.

Caveat	Description
CSCuc39115	**Symptom:** When a secondary line card, which is in Active state due to a line card switchover, is removed from a redundancy group, an error message is displayed: `ERR: Updating red sb for primary i/f 48 failed. Linecard redundancy is now in an inconsistent state.` **Conditions:** This issue occurs when a Secondary line card is in Active state due to a line card switchover and the other primary line cards are powered down. **Workaround:** There is no workaround.

CSCuc40784	**Symptom:**
	The following entity MIB-related traceback and error messages are displayed:
	`*Sep 27 06:12:03.684 IST: %ENT_API-4-NOALIAS: Physical entity not found when adding an alias with physical index = 3754 and logical index = 0 to the Entity MIB`
	`-Traceback= 1#3f63c1cb6a3201f526ad25c8993f33d5 :10000000+121F708 :10000000+12C6890 :10000000+12C4C00`
	Conditions:
	This issue occurs when the line card is powered off, powered on, and then powered off again within a period of 5 to 10 seconds.
	Workaround:
	There is no workaround.

CSCuc42319	**Symptom:** During a Supervisor switchover, or during system boot up, the following message is displayed on the Supervisor console: `"%C4K_CHASSIS-6-XPOINTSWITCHRESET"` **Conditions:** This issue is seen during a Supervisor switchover because the line card needs to reconnect to the new active Supervisor. This message indicates that the line card has detected a backplane link failure between the line card and the active Supervisor. This link failure event was reported to the active Supervisor, which triggered an XPOINTSWITCH reset. This message informs that a XPOINTSWITCH reset has been issued to recover the backplane links between the line card and the active supervisor. **Workaround:** There is no workaround. The XPOINTSWITCH reset recovers from the link failure. Modems connected to the line card may temporarily drop offline.

Caveat	Description
CSCuc43664	**Symptom:** All manual DEPI sessions are in "rf-shut" state. **Conditions:** This issue occurs after a combination of line card high availability, stateful switchover (SSO), and a hardware module reset. **Workaround:** To recover from this condition: 1. Run the **no cable downstream rf-shut** on each rf-shut channel. 2. Initiate a single SSO without saving the configuration. This recovers all sessions.
CSCuc47174	**Symptom:** SNMP traps for link-status are not sent for some QAM ports when they are added to a redundancy group. **Conditions:** This issue occurs under two conditions: 1. When the SNMP trap link status is removed from the QAM port when it is configured on a standalone line card and this line card is added to a redundancy group. 2. When SNMP trap link status is configured in Qam-redundancy port, SNMP traps are removed if there is a corresponding LC_IMAGE_UPGRADE event. **Workaround:** Reconfigure SNMP trap link status on the Qam port from where it is removed.
CSCuc49069	**Symptom:** Remote DEPI ports are impaired after a series of line card high availability, stateful switchover (SSO), and a hardware module resets. DEPI session are displayed as Active, but modem do not come online. **Conditions:** This issue occurs when start frequency on the remote DEPI port is modified a few times before the line card high availability, SSO, and a hardware module reset combination. **Workaround:** To avoid this issue, save the configuration and reboot after changing the start frequency. To recover from this issue, perform a shut/no shut of the RF port.

Caveat	Description
CSCuc53957	**Symptom:** The QAM associated with the Cisco RFGW-10 DS-384 line card is removed if line card high availability and stateful switchover (SSO) are executed in a particular sequence. **Conditions:** This issue occurs when: 1. The secondary line card is initializing and the SSO is triggered 2. The next line card redundancy (LCRED) operation from primary line card to secondary line card triggers a missing QAM configuration problem. **Workaround:** Trigger another LCRED. The missing QAM issue is resolved.
CSCuc54049	**Symptom:** Tracebacks are observed after replacing the secondary Cisco DS48-1G line card with a Cisco DS-48 line card. **Conditions:** This issue occurs when the secondary Cisco DS48-1G line card is configured to protect other DS48-1G line cards. After replacing the secondary DS48-1G with the Cisco DS48 line card, the tracebacks are observed. **Workaround:** There is no workaround. A Cisco DS-48 line card cannot protect the Cisco DS48-1G line cards.
CSCuc56647	**Symptom:** Traceback occurs when a new remote RF profile is created. **Conditions:** This issue occurs when there are 16 RF profiles existing in the system. The maximum number of RF profile in the systems is 16, and that limit is reached. **Workaround:** Check the number of existing RF profiles before creating a new one.

Caveat	Description
CSCuc58675	**Symptom:** A Qam-redundancy port configured as shutdown comes up in "UP" state instead of remaining in shutdown state. **Conditions:** This issue occurs if the secondary line card initially goes in active state following the reset of both the primary and secondary line cards. **Note** This issue affects only the running-configuration and not the startup-configuration. **Workaround:** Manually configure the Qam-red port as shutdown.
CSCuc61424	**Symptom:** On the Cisco RFGW-10 DS-384 line card, the DTI timing offset increases in time, when the offset should reduce it. **Conditions:** This issue occurs when the user inputs the DS-384 timing offset in the command line interface (CLI). **Workaround:** Do not use the timing offset for the Cisco RFGW-10 DS-384 line card.

Resolved Caveats for Cisco IOS-XE Release 3.2.0SQ

There are no resolved caveats for this release.

Important Notes

Documentation Updates in Cisco IOS-XE Release 3.2.0SQ

The following structural changes have been made in *Cisco RF Gateway 10 Software Feature and Configuration Guide*:

- The *Configuring QAM Interface Features for the Cisco RFGW-10* section is now a separate configuration guide—*Configuring the Cisco RFGW DS-48 Line Cards*.
- The *Modular Cable Modem Termination System DOCSIS MPEG Transport Manual Mode* document is now merged with *M-CMTS DEPI*.

Related Documentation

These documents are available for the Cisco RFGW-10 platform on Cisco.com:

- *Cisco RF Gateway 10 Hardware Installation Guide*
- *Configuring the Cisco RFGW-10 DS-384 Line Card*
- *Cisco RF Gateway 10 Command Reference*
- *Cisco RF Gateway 10 Software Feature and Configuration Guide*
- *Software License Activation for Cisco RF Gateway 10 Line Cards*
- *Cisco RF Gateway 10 MIB Specification Guide*
- *Cisco RF Gateway 10 Quick Start Guide*
- *Release Notes for Cisco RF Gateway 10*

Documentation Modules

Each module in the Cisco IOS documentation set consists of more than one hardware installation guides, configuration guides, and command references. Hardware Installation Guides describe the hardware components and procedure to remove and install these components. Configuration guides describe protocols, configuration tasks, and Cisco IOS software functionality, and contain comprehensive configuration examples. Command reference provides complete command syntax information.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

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This document is to be used in conjunction with the documents listed in the "Related Documentation" section.